ing each bundle; the absence of lacunes in the hadrome; and the irregular arrangement of the vessels.

In contrast to *Equisetum Telmateja*, mentioned above, the tubers of *E. sylvaticum* are ovoid and arranged so as to form a rosary; but the structure agrees very well with that of the preceding species, except that some layers of the bark-parenchyma are strongly thickened so as to form a kind of protecting sheath around the central part of the tuber, which peculiarity is, also, to be observed in the rhizome of this species.—THEO. HOLM.

Yeast fungi.

Professor Emil Christian Hansen upholds[2] the correctness of statements concerning endogenous spore-formation in the cells of Saccharomyces, against the opposition of Moeller, to whose paper the February GAZETTE called attention. Hansen gives a short review of spore-formation in this division of fungi, the conclusion of which is that the spores possess a membrane and germinating power. Very likely Moeller has confounded oil-drops and similar formations often found in old cells, with the true spores. It is incomprehensible that anybody can doubt the formation of endogenous spores in Saccharomyces. But of course we have to follow strictly the rules given by Hansen.[3]

Prof. Groenlund[4] has established four new yeast fungi, namely, *Saccharomyces Ilicis I* and *II* (both found on *Ilex*), *S. Aquifolii*, and *Torula Novæ-Carlsbergiæ*. The three Saccharomyces are found producing spores and the new species are based upon the relation of this phenomenon to temperature. The Torula gives beer a very unpleasant and bitter taste.—J. CHRISTIAN BAY.

Soluble pentoses in plants.

De Chalmot[5] gives in his studies on the pentoses in the plants a very important contribution to the chemistry of assimilation. The so-called "pentosanes" of Tollens[6] are widely distributed in the plants. These give pentoses by hydrolysis, and two sugars, arabinose and xylose, have been

[2] Centralbl. f. Bakteriol. und Parasitenkunde, XIII, (1893) 16.
[3] Meddelelser fra Carlsberg Laboratoriet, II, (1886) 152–167; III, (1891) 53–78.
[4] Zeitschr. f. d. gesammte Brauwesen, no. 30–32, 1892.
[5] Reprint from the American Chemical Journal, XV, no. 1. (1893.)
[6] Die landwirtschaftlichen Versuchsstationen, XXXIX, 401 (1891), esp. pp. 425–430.